



OPERATING PERMIT (Conditional Major) Issued Pursuant to Tennessee Air Quality Act

Date Issued:

Permit Number:

456670

Date Expires: March 1, 2013

Issued To:

Installation Address:

Ford Construction Company

2353 Highway 104 West
Dyersburg

Installation Description:

01: 400 TPH Asphalt Plant, Drum
w/Baghouse Control

02: 200 TPH Asphalt Plant,
Rotary Mixer, Baghouse, Bins & Silo

Modification: Upgraded Source 01 to 400TPH
& added associated equipment.

Emission Source (facility) Reference No.

23-0014

NSPS

The holder of this permit shall comply with the conditions contained in this permit as well as all applicable provisions of the Tennessee Air Pollution Control Regulations.

General Condition:

1. The applications that were utilized in the preparation of this permit are dated **May 8, 2003** and signed by **Calvin Lambert**, Superintendent of the permitted facility. If this person terminates his employment or is reassigned different duties such that he is no longer the responsible person to represent and bind the facility in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the Technical Secretary of the change. Said notification shall be in writing and submitted within thirty (30) days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the facility in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the facility until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

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TECHNICAL SECRETARY

No Authority is Granted by this Permit to Operate, Construct, or Maintain any Installation in Violation of any Law, Statute, Code, Ordinance, Rule, or Regulation of the State of Tennessee or any of its Political Subdivisions.

NON-TRANSFERABLE

CN-0827 (Rev. 9-92)

POST AT INSTALLATION ADDRESS

RDA-1298

SECTION I: General conditions for this facility excepting as noted are as follows:

2. The Permittee has elected to opt-out of being issued a major source operating permit pursuant to Division Rule 1200-3-9-.02(11)(a). The Permittee would be considered a major source because their potentials to emit **carbon monoxide (CO)**, **sulfur dioxide (SO₂)**, and **nitrogen oxides (NO_x)** are greater than 100 tons per year each at the time of application. The Permittee has agreed to be subject to limitation(s) in order to be below the major source applicability threshold for **CO**, **SO₂**, and **NO_x** of 100 tons per year each.
3. Any noncompliance with any condition(s) of this permit set to restrain the "potential to emit" below the applicability threshold(s) of 1200-3-9-.02(11) of the Tennessee Air Pollution Control Regulations, shall be reported in writing to the Technical Secretary within fifteen (15) working days of such discovery. This notification, at a minimum, shall include the identification of the source, identification of the permit condition(s) violated and details of the violation.
4. In this permit facility means inclusion of all sources of air pollution at this location. Alternately, each source at this location has a specific source identification number, i.e., 23-0014-01.
5. The Permittee is placed on notice that **Conditions 20, 22, 23, 28, and 32** of this operating permit for this facility contain limitations that allow the Permittee to opt-out of the major source operating permit program requirements specified in Division Rule 1200-3-9-.02(11). Failure to abide by these limits will not only subject the Permittee to enforcement action by the State of Tennessee, but it may also result in the imposition of Federal enforcement action by the United States Environmental Protection Agency and the loss of being Federally recognized as a conditional major source.
6. Compliance with **Conditions 20, 22, 23, 28, and 32** assures that the facility will be below the major source applicability thresholds for **CO**, **SO₂**, and **NO_x** of 100 tons per year each.

For source **23-0014-01** this assurance is based on AP-42 Chapter 11, Section 1 (Hot Mix Asphalt Plants, dated **December, 2000**), and Chapter 1, Section 3 (Fuel Oil Combustion, dated **September, 1998**) from which the emission factors were used to calculate emissions as shown below:

Parameter	Based on use of Waste oil as fuel			
	AP-42 Table	Emission Factor, lb/ton	Emissions without limiting conditions, ton/yr	Emissions with limiting conditions, ton/yr
CO	11.1-5	0.13	227.8	41.6
NO _x	11.1-5	0.06	96.4	17.6

Parameter	Based on use of Waste oil as fuel				
	AP-42 Table	Emission Factor, lb/1000 gal	Emissions without limiting conditions, ton/yr*	Emissions with limiting conditions, ton/yr	Remarks
SO ₂	1.3-1	147(S)	296.2	54.1	S is the fuel sulfur content, in percent (by weight).

*Since the fuel sulfur content is required in order to use the AP-42 emission factors to calculate SO₂ emissions, the emissions with and without limiting conditions are based on the maximum fuel sulfur content allowed by **Condition 22**.

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For source **23-0014-02** this assurance is based on AP-42 Chapter 11, Section 1 (Hot Mix Asphalt Plants, pre-December, 2000), and Chapter 1, Section 3 (Fuel Oil Combustion, pre-September, 1998) from which the emission factors were used to calculate emissions as shown below:

Parameter	Based on use of No.2 oil as fuel			
	AP-42 Table	Emission Factor, lb/tn	Emissions without limiting conditions, ton/yr	Emissions with limiting conditions, ton/yr
CO	11.1-5	0.13	113.9	20.8
NO _x	11.1-5	0.06	48.2	8.8

Parameter	Based on use of No. 2 fuel oil as fuel				
	AP-42 Table	Emission Factor, lb/1000 gal	Emissions without limiting conditions, ton/yr*	Emissions with limiting conditions, ton/yr	Remarks
SO ₂	1.3-1	142(S)	157.7	28.8	S is the fuel sulfur content, in percent (by weight).

*Since the fuel sulfur content is required in order to use the AP-42 emission factors to calculate SO₂ emissions, the emissions with and without limiting conditions are based on the maximum fuel sulfur content allowed by **Condition 32**.

7. Should proof of compliance for the pollutant(s) with emission limitation(s) placed on this permit be required, the emissions measuring test method(s) and procedure(s) are the following:

<u>Pollutant or Parameter</u>	<u>Testing Methodology</u>
Particulate Matter	EPA Method 5 as published in the current 40 CFR 60, Appendix A
Sulfur Dioxide	EPA Method 6 as published in the current 40 CFR 60, Appendix A
Nitrogen Oxides	EPA Method 7 as published in the current 40 CFR 60, Appendix A
Carbon Monoxide	EPA Method 10 as published in the current 40 CFR 60, Appendix A
Sulfur content of fuels	EPA Method 19 as published in the current 40 CFR 60, Appendix A

8. Visible emissions from roads and parking areas shall not exhibit greater than ten (10) percent opacity using Tennessee Visible Emissions Evaluation (TVEE) Method 1.

This condition is established pursuant to Rule 1200-3-8-.01(1) of the Tennessee Air Pollution Control Regulations.

9. Fugitive emissions from this facility shall be controlled as specified in Rule 1200-3-8-.01. Specifically, no person shall cause, suffer, allow or permit fugitive dust to be emitted in such manner to exceed five (5) minutes per hour or twenty (20) minutes per day as to produce a visible emission beyond the property line of the property on which the emission originates, excluding malfunction of equipment as provided in Chapter 1200-3-20. Fugitive emissions from this facility shall be determined by Tennessee Visible Emissions Evaluation Method 4.

This condition is established pursuant to Rule 1200-3-8-.01(2) of the Tennessee Air Pollution Control Regulations.

10. Visible emissions from this facility shall not exceed twenty (20) percent opacity as determined by EPA Method 9, as published in the current 40 CFR 60, Appendix A (6-minute).

This condition is established pursuant to Rule 1200-3-5-.01(1) and -.03(6) of the Tennessee Air Pollution Control Regulations.

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11. Routine maintenance, as required to maintain specified emission limits, shall be performed on the air pollution control devices. Maintenance records shall be recorded in a suitable permanent form and kept available for inspection by the Division. These records must be retained for a period of not less than five (5) years.
 12. The Permittee shall submit written reports for each source as described below:
 - a. For source **23-0014-01** a written report stating the compliance status of this source with **Conditions 20, 22, and 23** shall be submitted by **March 31** of every year beginning in **2004**. This report shall cover the preceding calendar year and shall include the records required by **Condition 26**.
 - b. For source **23-0014-02** a report stating the compliance status of this source with permit **Conditions 28 and 32** shall be submitted by **March 31** of every year starting in **1997**. This report shall cover the preceding calendar year and shall include the records required by permit **Condition 34**. In addition, the report shall include a statement of certification of compliance with **Condition 30** to indicate proper control equipment operation. If compliance with **Condition 30** was not maintained at all times, the Permittee shall attach a narrative that explains the period(s) of noncompliance.
- These reports shall be submitted to the field office manager at the following address:
- Jackson Environmental Assistance Center
Air Pollution Control Division
362 Carriage House Drive
Jackson, TN 38305
13. This permit is valid only at this location.
 14. The issuance of this permit does not exempt the Permittee from any requirements of the Environmental Protection Agency pertaining to emissions from the operation of this facility.
 15. This permit supersedes any previous permit(s) for this facility.
 16. Excess emissions shall be addressed as specified in Chapter 1200-3-20 of the Tennessee Air Pollution Control Regulations. The control device shall operate at all times when the processing and handling equipment operates.
 17. The Permittee shall apply for renewal of this permit not less than sixty (60) days prior to this permit's expiration date pursuant to the Division Rule 1200-3-9-.02(3).

SECTION II: Conditions in this section apply to the following sources only.

23-0014-01 - 400 TPH Asphalt Plant with Baghouse Control - NSPS

18. The stated design capacity of this source is **400** tons per hour of asphalt production. A construction permit must be obtained before modifying the plant so that it can exceed this rate. The Permittee is not required to keep production records to demonstrate compliance with this rate, however, the Technical Secretary may require the Permittee to prove compliance with this rate.

19. **Natural gas, No.2** fuel oil, and **Waste** oil only shall be used as fuels for this source.

20. Production rate for this source shall not exceed **640,000** tons of asphalt during any interval of 12-consecutive months.

This limitation is established pursuant to Rule 1200-3-9-.02(11) (a) of the Tennessee Air Pollution Control Regulations and the information contained in the agreement letter from the Permittee dated **May 8, 2003**.

21. Particulate matter emissions from this source shall not exceed **0.04** grains per dry standard cubic foot (**9.1** pounds per hour).

This condition is established pursuant to Rule 1200-3-16-.08(3) of the Tennessee Air Pollution Control Regulations.

22. The sulfur content of the **No.2** fuel oil and **Waste** oil burned at this plant shall not exceed **0.5** percent by weight.

This limitation is established pursuant to Rule 1200-3-14-.01(3) of the Tennessee Air Pollution Control Regulations and the information contained in the agreement letter from the Permittee dated **May 8, 2003**.

23. The sulfur dioxide emissions shall not exceed **54.1** pounds per hour on a monthly basis.

This limitation is established pursuant to Rule 1200-3-14-.01(3) of the Tennessee Air Pollution Control Regulations and the information contained in the agreement letter from the Permittee dated **May 8, 2003**.

24. The SO₂ emission rate on a monthly basis shall be determined by the following equation:

$$SO_2 = \frac{GPM}{HPM} \times \frac{1}{1000} \times f \times (S) \text{ in pounds per hour, where}$$

GPM = Gallons per month of fuel oil used;
 HPM = Hours per month of source operation;
 f = **142** for **No.2** and **147** for **Waste** oil;

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S = Sulfur content of fuel (in weight percent).

25. The asphalt plant controlled by the baghouse shall not operate unless the baghouse is in operation. In the event a malfunction/failure of the baghouse occurs, the operation of the asphalt plant controlled by the baghouse shall be regulated by the provisions of Chapter 1200-3-20 of the Tennessee Air Pollution Control Regulations.
26. A log of the asphalt plant production records, i.e., summarizing operating time and fuel oil usage on a monthly basis and summarizing asphalt production on a 12-consecutive months basis that readily shows compliance with **Conditions 20, 22, and 23** must be maintained at the source location and kept available for inspection by the Technical Secretary or a Division representative. The log shall readily provide the information required in **Condition 36**. This log must be retained for a period of not less than five (5) years.
27. Compliance with the **0.5** percent sulfur content of the **Waste** oil shall be demonstrate by a written statement by the vendor, on an annual basis, guaranteeing in advance that the **0.5** percent by weight limit will not be exceeded or a sulfur content analysis on each shipment of fuel oil shall be provided. These records must be kept available for inspection by the Technical Secretary or a Division representative. These records must be retained for a period of not less than five (5) years.

23-0014-02 - 200 TPH Asphalt Plant with Baghouse Control - NSPS

28. Operating time shall not exceed **1,600** hours per year.
29. The stated design capacity of this source is **200** tons per hour of asphalt production. A construction permit must be obtained before exceeding this capacity. The Technical Secretary may require the Permittee to prove compliance with this rate.
30. Excess emissions shall be addressed as specified in Chapter 1200-3-20 of the Tennessee Air Pollution Control Regulations. The baghouse must operate at all times when this source is operating.
31. Particulate matter emitted from this source shall not exceed **0.04** grains per dry standard cubic foot (**5.8** pounds per hour).
32. The sulfur content of the fuel oil burned at this plant shall not exceed **0.5** percent by weight (**36.0** pounds per hour sulfur dioxide emissions). This limitation is established pursuant to Rule 1200-3-26-.02(6)(b) of the Tennessee Air Pollution Control Regulations and the information contained in the agreement letter dated April 24, 1992.
33. The **SO₂** emission rate shall be determined by the following equations:

For **No.2** Fuel Oil:

$$\frac{\text{GPM}}{\text{HPM}} \frac{1}{1000} (142) (S) = \text{pounds per hour SO}_2$$

Where

GPM = gallons per month fuel oil used

HPM = hours per month of plant production using fuel oil

S = weight percent of sulfur in fuel

For **No.4** Fuel Oil:

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$$\frac{\text{GPM}}{\text{HPM}} \frac{1}{1000} (150) (S) = \text{pounds per hour } \text{SO}_2$$

Where

GPM = gallons per month fuel oil used

HPM = hours per month of plant production using fuel oil

S = weight percent of sulfur in fuel

34. As proof of keeping the emissions from the permitted facility below the major source threshold, the Permittee will maintain records of the following:

Operating time (hours per day, month and year)

Fuel usage (gallons of fuel oil per month)

Hours of fuel oil usage (hours per month)

Analysis of fuel oil sulfur content (Information provided by vendor, on no less than a per batch basis, is acceptable)

SECTION III: Forms for Recordkeeping.

35. A record of this information at this facility, in the following format or an alternative format approved by the Technical Secretary in writing, must be maintained at the facility's location and kept available for inspection by the Technical Secretary or his representative. This record must be retained for a period of not less than five (5) years.

MONTHLY LOG FOR 23-0014-02

DATE	HOURS OF OPERATION	DATE	HOURS OF OPERATION
1		16	
2		17	
3		18	
4		19	
5		20	
6		21	
7		22	
8		23	
9		24	
10		25	
11		26	
12		27	
13		28	
14		29	
15		30	
		31	
For _____, 199 _____ (Month)		Fuel Oil Usage - _____ Gallons of Oil Used _____ % Sulfur Content _____ Hours of Oil Usage	

YEARLY LOG FOR 23-0014-02

MONTH	HOURS OF OPERATION	MONTH	HOURS OF OPERATION
JAN		JUL	
FEB		AUG	
MAR		SEP	
APR		OCT	
MAY		NOV	
JUN		DEC	
For 199 _____		Total Hours - _____ Hours	

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12-CONSECUTIVE MONTHS Log for 23-0014-01

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(End of Conditions)